

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/GB2004/001448

International filing date (day/month/year)
02.04.2004

Priority date (day/month/year)
09.04.2003

International Patent Classification (IPC) or both national classification and IPC
H04Q7/38

Applicant
INTERNATIONAL BUSINESS MACHINES CORPORATION

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/GB2004/001448

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/GB2004/001448

Box No. II Priority

1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	3-5,8-10, 12-14,
	No: Claims	1,2,7,11,16-19
Inventive step (IS)	Yes: Claims	3,8-10,12-14
	No: Claims	4,5,6
Industrial applicability (IA)	Yes: Claims	1-14,16-19
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item III.

1. The terms "reserve channel" and "service information" used in claim 15 are vague and unclear, leaving the reader in doubt as to the technical features to which they refer, contrary to the requirements of Article 6 PCT.

Re Item V.

2. The following document is referred to in this communication:
D1 : WO 01/31945 A (TELCORDIA TECH INC) 3 May 2001 (2001-05-03)
3. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1, 2, 7, 11, 16-19 is not new in the sense of Article 33(2) PCT.
 - 3.1 Document D1 discloses (the references in parenthesis applying to this document): a method for scheduling transmissions of data from a plurality of remote devices (cf. page 6, lines 1-12), comprising the steps of scheduling a transfer period for transferring data from the device taking into account the wireless network signal strength of the device for the scheduled transfer period (cf. page 6, line 21-26 and page 7, line 30 to page 8, line 26) and transfers the data at the scheduled transfer period. Therefore the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT. The same reasoning applies to claims 16-19.
 - 3.2 It is implicit in the disclosure of D1 that the transfer period is computed including the start and end time in order to actually schedule the transmission (cf. page 9, lines 3-7 "bandwidth and duration"). Therefore the subject-matter of claim 2 is not new in the sense of Article 33(2) PCT.
 - 3.3 Document D1 discloses that the device notifies the requested size (cf. page 9, lines 33 to 35). Therefore the subject-matter of claim 7 is not new (Article 33(2) PCT).
 - 3.4 Document D1 discloses that the current conditions are checked, and if the transfer can not be carried out as scheduled, it is rescheduled (cf. page 9, lines 21-32). Therefore the subject-matter of claim 11 is not new (Article 33(2) PCT).
4. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 4, 5 and 6 does not involve an inventive step in the sense of Article 33(3) PCT.

- 4.1 Document D1 considers the network transmission parameters when scheduling the transmission periods. The subject-matter of claims 4 and 5 differs from D1 in that the capabilities of the server are also considered when scheduling the transmissions. It is usually the case that the limiting part in the data transfer is the capacity of the network. However it would be obvious to the person skilled in the art to consider also the server capacity in the case that server capacity could also be a limiting factor. Therefore the subject-matter of claims 4 and 5 does not involve an inventive step in the sense of Article 33(3) PCT. ✓
- 4.2 The subject-matter of claim 6 differs from D1 in that more than one transfer period is computed. This cannot be considered as involving an inventive step in the sense of Article 33(3) PCT because it is just the repeated application of the method disclosed in D1. It would be obvious to the person skilled in the art that if there is more data to be sent, the method of D1 can be applied many times. ✓
5. The subject-matter of claim 3 differs from D1 in that before the transmission the transmission period is recalculated and the periods of other devices are recalculated if the recalculated period interferes with the periods originally scheduled for other devices. The problem solved by this feature can be seen as avoiding repeated failures that would otherwise occur as a result of a recalculated period.
6. The subject-matter of claims 8-10 differs from D1 in that the server stores the wireless conditions associated with each client with respect to time. This feature allows keeping a history of the wireless conditions.
7. The subject-matter of claims 12-14 differs from D1 in the use of priorities to schedule the transmissions. This feature allows finer control of transmissions.
8. Therefore the subject-matter of dependent claims 3, 8-10, 12-14 is new (Article 33(2) PCT) and involves an inventive step (Article 33(3) PCT).